

# THE COMMONWEALTH OF MASSACHUSETTS WATER RESOURCES COMMISSION

### Meeting Minutes for March 14, 2002

### **Members in Attendance:**

Mark P. Smith
Marilyn Contreas
Peter Webber
Control Control Commissioner, DEM
Control Control

Cynthia Giles Designee, DEP Designee, DFA Gerard Kennedy Designee, DFWELE Mark Tisa Designee, MDC Joe McGinn Designee, CZM Joe Pelczarski **Public Member** Frank Veale Gary Clayton Public Member David Rich **Public Member** Bob Zimmerman **Public Member** 

### Others in Attendance:

Mike Gildesgame DEM Linda Marler **DEM** Michele Drury **DEM** Gretchen Roorbach **MWRA** Vicki Gartland **DEM** Margaret Kearns Riverways Steve Garabedian **USGS** Richard Thibedeau **DEM** 

Sharon Raymond Fay, Spoffard & Thorndike

Cecil Curran USDA-NRCS

Jason Burtner CZM
Keith Turi DEM
Steve Asen DEM
Michael Fleming EOEA
Sharon Mcgregor EOEA
Eileen Simonson WSCAC

Chip Fontaine Weymouth DPW
Dick Carnevale City of Peabody
Nina Danforth DEM/OWR
Diane Beecham Westwood
Joseph Champagne Westwood

Jessica Stephens Neponset River Watershed Association

Ryan Ferrara MWRA

Chris Hatfield US Army Corps of Engineers

### Agenda Item #1: Executive Director's Report

- Smith introduced Gerard Kennedy, the new designee for the Department of Food and Agriculture.
- Smith, Rich, and Butler met with the ground water and well drillers association about the lawn care guidance. We listened to their concerns and they provided very constructive comments. A couple of communities have banned private wells for irrigation, using our draft guidance as the reason. We will continue to work on the lawn and landscape document; therefore Item 7 will not be discussed today. We will bring it to next meeting.
- Staff received a letter from Stoughton thanking them for the quick decision. Smith is considering this to be Stoughton's request that they'd like the Commission to make the decision in May if no unexpected comments arise at the public hearings. Drury added that the WRC should have received the notice of public hearing in their package. All WRC members are encouraged to attend the public hearing.
- MACC had its annual meeting. Bob Durand gave the keynote address and Smith gave a talk on security issues. The meeting was well attended.
- Jackie Murphy is moving to Virginia and will be leaving soon.

#### Marler and Gartland provided an update on the hydrologic conditions:

- This is now called the Massachusetts Drought Status Report. The state still is in a drought situation. The Drought Management Task Force has upgraded the entire state to a drought watch.
- There was about 75% of normal rainfall in February, although all the numbers are not in. We would normally expect about 3-4 inches of rainfall this time of year, but we only got about 2 inches. We've been 54% below normal for the entire water year. In accordance with the Drought Management Task Force and the drought plan trigger levels, we proceed to next level when the 3, 6 and 12 month criteria fall below 65%. The criteria for a watch are being met. The Western region is in an advisory. If we just look at February, we are in the drought warning for the precipitation index. Overall, the past 12 months have not been that bad, but it was a bad fall. This could be turned around by a few good storms and tropical storm season is coming.
- If we only got 2 inches of rain in March, most of the state would be at the drought warning level for the precipitation index. We haven't had an above normal month for rainfall since September.
- Streamflow Levels: we had a good summer, but starting in October, things haven't been that good, although the northwest corner of the state has returned to the normal range for streamflow. The last 45 days composite shows that streamflow is still below normal. The longer term graph shows that streamflow is coming back up from the end of December low. We've had a series of small but consistent storms that have helped. The western half of the state is doing better in terms of streamflow than the east. This correlates directly with rainfall.
- Ground water levels: In September levels were fairly decent across the state. Levels have fallen off throughout the fall. There was a little progress in February in the northwest corner of the state due to the rain. The trend in southeast is rising, but they are still in the below the normal range. Pittsfield is approaching normal.
- There has been no snow pack. This has caused/will cause some major problems. It is going to be a big factor in terms of fire danger and lack of recharge for water supply.

- Reservoir percent full: Last month's data are encouraging that things are turning up, however they are still well below the normal level for this time of year. Water suppliers are putting on outdoor water use restrictions. Things are generally improving. The Quabbin is below normal but still well above MWRA's drought plan range.
- The Palmer drought index shows Massachusetts in the near normal range. This gets issued every two weeks. Every other week we are in a moderate drought and every other week we are near normal. So we seem to be right on the edge. The Palmer Drought Index does not include a factor for snow pack, which is quite significant in this part of the country.
- The Crop Moisture Index seems to fluctuate every time you look at it. It is dependant on recent rainfall. It represents water content in the top five inches of topsoil.
- The Drought Monitor issued today shows an intensifying of drought conditions in the Mid-Atlantic States. New England has stayed the same in terms of their indices. We are in the severe drought level, as they classify it. This is equivalent to our watch level.
- Fire danger became a large concern last month, tripping us into the drought watch level. We are very concerned about the lack of snow pack which allows the ground to dry up. The regional fire offices have been measuring fire danger levels since March 1<sup>st</sup>. These have gone as high as Level 4 in the last two weeks. Fire Danger Level 4 would rank as a drought warning category. Fortunately, we've been mostly in the Level 2 or 3 range and those levels put us in advisory or watch level. Fire Danger Levels can rapidly change and there's a lot of concern that we'll be seeing an earlier start to the fire season and a more intense situation than normal because of all these factors. Apparently, there have already been some fires, which is unusual for this early in the year.
- The Cape and Island regions were in an advisory level in January. Ground water continues to be below normal. This has been going on for more than a year. We are not as worried about this on the Cape as we would be in other areas because there is a lot of storage down there. So even though it is below normal, it is a very small range compared to the thickness of the aquifer.
- The northeast region was at drought watch in January. Reservoir levels were well below normal.
- The central region was at a drought watch.
- The Connecticut River region at a drought watch. Precipitation dipped into warning levels. There is also concern about shallow private water supply wells which were starting to see problems.
- The southeast region was in a drought advisory. They didn't have the same problems as the rest of state. Things were in the normal to slightly below normal range.
- The western region's precipitation index was at the advisory level, but streamflow was beginning to drop.
- The worst areas of the state in terms of drought levels are the Connecticut River, central and northeast regions.
- At the Drought Task Force meeting it was decided to declare a drought watch for entire state. Fire danger and lack of snow pack drove this. In addition, although streamflow and reservoir levels are rising, they are still below normal. There was concern that they'd start to drop because of lack of snow pack and precipitation, now that we are at the end of the recharge season. Reservoirs aren't full yet. So we recommended going to watch level for the entire state and we are implementing the actions for this level.

Clayton suggested we keep the legislature informed of this situation. Webber replied that legislature asked each of the environmental and public safety agencies about this. We ought to make ourselves available to brief the General Court. Smith and Jim Hunt from EOEA have been trying to coordinate this.

### Agenda Item #2: Recognition of Richard Thibedeau

Smith thanked Richard Thibedeau for his many years of service to the Commonwealth and the Water Resources Commission as he takes early retirement. Webber said it had been an honor to work with Thibedeau. Thibedeau has been a tremendous support to the Department of Environmental Management. He has been its chief problem solver. Webber presented a proclamation from Governor Jane Swift, proclaiming March 14, 2002 to be Richard Thibedeau Day, in recognition of his 27 years of dedicated public service.

McGregor, representing Secretary of Environmental Affairs Bob Durand, remarked that Thibedeau has contributed so much to the Commonwealth. On behalf of the Secretary, she read a statement saying that the communities across Massachusetts have benefited from the many projects he has ushered in during his many years of public service. Thibedeau has been an invaluable asset both to the Commonwealth and his colleagues. McGregor, speaking for herself, said that Thibedeau was often the voice of reason at many contentious Water Resource Commission meetings.

Curran, representing the Natural Resources Conservation Service, said that we are losing a national treasure. Massachusetts leads the nation in watershed planning, in large part due to Thibedeau. Curran presented him with a certificate for outstanding leadership.

Simonson, representing WSCAC, praised Thibedeau for his work with water policy and presented him with an oral history of the Quabbin Reservoir. Gildesgame praised Thibedeau for his leadership and mentoring qualities. Thibedeau set a high standard of excellence. Smith, representing the WRC, said that Thibedeau had been critical to the WRC and presented him with a Certificate of Recognition from WRC.

Thibedeau said he'd been coming to WRC meetings for about 20 years. The interesting thing about the WRC is that it has thrived and increased in stature better than most of the Commonwealth commissions. He praised the Executive Directors, past and present. All decisions made by the WRC have been based on science. That has helped the WRC do its job and make decisions that are legally defensible. All aspects of water interest are represented on the Commission. This has led to a more informed decision making process. In addition, the open process of the decision making has been a key to good policy making. He thanked everyone in the room and said it was a privilege to have worked with them all.

# <u>Agenda Item #3: Discussion – Request for Determination of Insignificance Under the Interbasin Transfer Act for Oxford's Sewering Project</u>

Drury acknowledged Oxford's representative. Oxford is proposing to develop an additional connection to the town of Auburn to address its wastewater problems at schools and a condominium complex. Oxford is located in the French River Basin. Auburn discharges its wastewater into the Blackstone River Basin. The proposal is to transfer 16,000 gpd. This is a small amount; therefore the town is requesting a determination of insignificance. They have an existing connection with Auburn with a capacity of 0.024 mgd. The 16,000 gpd is in addition to

that. The capacity of the new connection is limited by the Leicester Road Pumping Station. Will this cause growth in the town? There is some potential for infilling of about 25 new service connections, but the total amount of transfer that can be physically handled by this new system is only 16,000 gpd. If the capacity of the pumping station is increased, Oxford will need to come before the WRC for another Interbasin Transfer review. Staff feels this project meets the criteria for insignificance. We are looking at some cumulative impacts. The town of Charlton is applying to purchase water from Oxford. They will also be requesting a determination of insignificance for 0.18 mgd. Based on the preliminary information we have from Charlton, we don't believe these two projects together would have significant cumulative impacts. There were other issues raised about base flow in Wellington Brook, which will be addressed. We discussed these with DEP. DEP has major concerns about water quality impacts from failing septic systems at the schools. DEP feels that this issue outweighs any loss of base flow. We also asked DEP to address alternatives to this project. According to DEP, this sewer line is the best way to address the failing septic systems.

Gartland stated that we are required to look at several flow factors under the insignificance review, specifically the 95% and 99% flow durations and the 7Q10 flow, if there is a wastewater treatment plant with a 7Q10 requirement downstream. The Webster wastewater plant is downstream of this project. Usually, we break the sewered area up into subbasins, to look at the impacts. In this case, the areas to be sewered are fairly close to the mainstem. It is difficult to distinguish flow direction at this point. The area is all wetlands. Impacts seem to be all to mainstem, rather than to Wellington Brook. Ground water flow may vary with the seasons. So we felt it would be more appropriate to look at impacts to mainstem. Based on that we felt it met all the criteria for insignificance.

Clayton asked if we'd be following up on Riverways' comments on Wellington Brook. Gartland said she looked at the data. Two of the areas to be sewered are not in the Wellington Brook subbasin. But she will be in touch with Riverways to discuss this further.

Clayton asked about the limiting factor status of the pumping station. What about the line itself? The reply was that the system is also limited in the amount that can be transferred by an Intermunicipal Agreement. If it is amended in future, it would trigger Interbasin Transfer Act review. Clayton asked for a letter from Board of Selectmen to acknowledge this. This will be provided and the language in the decision, if it is to find the project insignificant, will be made stronger to say that that the decision is for the project as presented and it is limited to the additional 16,000 gpd.

A vote will be requested in April.

### Agenda Item #4: Update - MWRA's Systems Expansion Policy

Ferrara told the WRC that the MWRA Advisory Board is the fiscal watchdog agency for the MWRA. The Advisory Board represents the 60 cities and towns that belong to the MWRA. It works to provide policy and financial guidance to the MWRA. The Advisory Board was tasked five years ago by the legislature to help MWRA clarify its existing expansion policies, both on the water and wastewater side. The net result has been a series of policy recommendations. These recommendations establish the basis for what the MWRA will accept in an application for both water and wastewater. When we first started developing these policies five years ago, we

said that we'd reconvene this group in five years to figure out if the policies needed to be refined. This is what we've been doing for the last few months. We are still in progress. The people actually involved include Advisory Board staff, MWRA staff, WSCAC, and WAC (MWRA's Wastewater Advisory Committee).

We first looked at what issues we were having with existing policies. What can use some refinement? We developed a series of discussion topics. These became the agendas for the meetings we've been having during this process. We also developed a mission statement. We are only seeking to refine or improve upon existing policies. We are not trying to overhaul the process.

Progress to date: On the wastewater side, five years ago there was moratorium placed on new communities joining the MWRA's wastewater system. It appears that we will be lifting this. There have been issues in past when the legislature would authorize a single user to be placed on the system, without any analyses by MWRA. What we want to happen on both the water and wastewater side, when an applicant gets approval through the legislature, is that there is language in legislation reflecting that there are numerous other parties that need to approve the applications. In past applications, it was required that any new wastewater communities had to remove Infiltration and Inflow (I/I) at a 4-1 ratio. These communities also needed to make an escrow payment. This would ensure that the I/I work would get done.

On the water side, we are considering a stand-by fee and a surcharge to non-member communities. These have been controversial. With the standby fee: this would be for non-member communities with emergency connections. A fee would make them pay for this "insurance policy". The committee felt that it would be unwise to proceed with this because it wasn't in the spirit of a "good neighbor" policy or a good water supply management policy. In addition, these are actual interconnections. If a community was to be charged a fee from the MWRA, they may retaliate by charging a fee to the MWRA member community with which it has the connections. Or they may disconnect altogether, which would not make for good policy. The surcharge discussion is still on-going.

WSCAC has requested that we discuss strengthening user contracts to assure appropriate demand management. They have also suggested that the MWRA drought preparedness plan should include a safety margin.

## <u>Agenda Item #5: Presentation – Proposals for Assistance from the New England Division, Corps of Engineers</u>

There were 16 proposals this year. The programs of the Army Corps New England District provide technical assistance to communities. One program, Planning Assistance to the States (PAS), is a broad based planning program. The other, the Flood Plain Management Services (FPMS) program, is a more narrowly focused program.

Last year the WRC did not receive very many applications for these terrific programs. The FPMS program is cost-free to the communities. PAS is a 50% match. Staff from DEM and the Corps put together a brochure and sent it out to all the communities in the Commonwealth, as well as the watershed team leaders. This year the response improved. In the next month, staff will develop a list of prioritized projects to forward on to the Corps through the Secretary's office. Gildesgame provided a summary of the project proposals:

#### **PAS**

- The SuAsCo watershed team applied for a project for monitoring activity and data collection for TMDL.
- The Hatfield DPW needs to make immediate repairs to a water supply dam. Chris Hatfield suggested that a long-term revamping of the dam may qualify.
- East Brookfield is looking to redesign part of the dam to manage lake levels in Lake Lashaway. The town doesn't have matching funds, but the Lake Association might.
- Westwood has an old airfield between two ponds, which seem to have flooding problems.
  This is a more complex project. Many factors are interacting and no one thing can be easily pinpointed as the cause of the problem. There is a real need for a study to look at all the factors.
- Weymouth submitted a few projects. Two projects have high priority for the town. The first is the Mill River flood mitigation study. Mill River flows from Weymouth's primary water supply source (Great Pond) in South Weymouth and ends at Whitman Pond. There is a ledge outcropping that constricts the river during periods of high flow, causing private property abutting the river to flood, resulting in flooded back yards and basements. The Norfolk County Mosquito Control Board looked at it and suggested that the only solution was blasting. The town felt that this was a bit radical. So Weymouth decided to ask the ACOE to look at it to see if there are other alternatives and to assess the upstream and downstream impacts of any alternative considered. Weymouth's second project is a seawall study. Weymouth has 13 miles of coastline in North Weymouth. Most of the seawalls here are old and in disrepair. The town is asking for the ACOE to review these seawalls and come up with some alternatives for repair.

Kennedy asked about the process and how projects are prioritized. In general, the evaluation by staff and the Corps consider how serious the problem is in terms of public health and safety and impacts to resources.

#### **FPMS**

- Peabody has submitted four projects, most having to do with residential areas that are subjected to flooding. The Flume Pond project would study the hydraulic and economic feasibility of constructing a flood control reservoir to protect downtown Peabody. The Robin and Quail Road project is to protect a residential area, as is the Meadow Pond project. The North River project is also designed to protect downtown. Some aspects of these downtown projects may be funded by FEMA.
- Leverett's proposal involves a dam structure. The Office of Dam Safety inspected the dam and identified some problems. The town is requesting conceptual design efforts.
- Burtner discussed Mushquashcut Pond and Straits Pond in Scituate and Hull. These are two shallow salt water ponds, and both proposals were submitted to address flooding issues. These ponds were identified on CZM's South Shore Atlas as tidally restricted, with a high priority. The goal is to reestablish a more normal flushing routine. One constraining factor is that both ponds are in low lying areas. There is a concern that by increasing flushing, existing flooding problems will be increased or exacerbated, so they are looking for technical assistance on how best to restore a normal flushing routine without increasing flooding. It is important to note that these projects are part of a broader ecological restoration program. The Hull project at Straits Pond is associated with a coastal ACEC. Clayton remarked that it was worth noting on "Richard Thibedeau Day" that when Thibedeau started working at

- CZM, the same Straits Pond area was subject to studies. Why does this need to be studied more? This was documented in the late 1970's. Should we be spending more money studying it?
- North Reading has submitted a project for Martin's Pond, which experiences flooding to residential areas. The town wants to develop solutions. Turi stated that North Reading is one of the most aggressive communities, in terms of addressing flooding issues. This project was identified in their plan.

Simonson asked if anyone ever sits down with towns to address zoning, storm water management, drainage etc. Gildesgame replied that most of these projects are part of larger programs. Turi stated that FEMA will be spending more money to look at what can be done to prevent future problems in terms of land use, etc. Many of these projects are part of the flood mitigation plan; therefore, if they have a plan in place, they have looked at the big picture.

Smith suggested that one of our criteria for the future project could be to require a flood mitigation plan. Turi stated that FEMA is actually considering not granting money to any community that does not have a flood mitigation plan in place.

### <u>Agenda Item #6: Discussion – Environmental Impact Report Scopes to be Used in Place of the Current IBT Application</u>

Four scopes have been developed. The existing Interbasin Transfer application was developed in 1985 and has not been updated since. It follows the Act closely, but does not follow the additional requirements of the regulations, Performance Standards or 1992 Water Conservation Standards. The current application causes much back and forth with proponents. It would be useful to have an application that actually asks for the information we need. MEPA changed its regulations in 1998 to require an EIR for significant interbasin transfers. This has proven to be very beneficial to our program. The EIR gives a better overview of the whole project. We've developed four scopes to be used in these EIRs:

- For a basic water supply transfer
- For a wastewater transfer
- For a wastewater transfer triggered by the development of a water supply (such as Canton and Elm Bank), and
- For communities that are applying to join the MWRA water supply system. MWRA has specific requirements and their system is different from the other types of water supply systems that we usually review. We've worked closely with MWRA on this. This is only for MWRA water supply applications. MWRA wastewater applications can use the generic wastewater scope.

These scopes are only for the portion of the EIR that deals with interbasin transfer. There may be other issues that need to be addressed in the EIR, not related to interbasin transfer. We state in the introduction that proponents will need a full scope from MEPA. For next month, please review the scopes and get comments to Drury within two weeks so they can be incorporated. Staff will be requesting a vote next month.

Meeting adjourned